

KENNEDY NASA PROCEDURAL REQUIREMENTS

Effective Date: September 21, 2020

Expiration Date: September 21, 2025

Responsible Office: Spaceport Integration and Services

CONTINUITY OF OPERATIONS PLANNING PROCEDURAL REQUIREMENTS

**National Aeronautics and
Space Administration**

John F. Kennedy Space Center

CHANGE LOG

Date	Revision	Description
07/29/2004	Basic-1	Changed the responsible office from Human Resources to Center Operations and extended the expiration date to allow the new organization time to review, amend, and process revisions.
10/18/2010	Rev. A	Updates were made to Purpose, Authorities, Applicable Documents, Measurement/Verification, Responsibilities of each of the Directorates, Appendix A Glossary of Terms, Appendix B Abbreviations and Acronyms List, and Appendix C Evaluation of Functional Activities.
10/8/2015	Rev. B	This document is revalidated after administrative updates to ensure compliance with NPR 1400.1, NASA Directives and Charters Procedural Requirements.
9/21/2020	Rev. C	This document is revalidated after the following administrative updates. Changed Mission Essential Infrastructure (MEI) to NASA Critical Infrastructure (NCI) throughout document. Updated Acronyms in Appendix B; and in 2.5.1 a, changed the reference to the CEMP's Table "6-1" Table "E."

TABLE OF CONTENTS

PREFACE

- P.1 Purpose
- P.2 Applicability
- P.3 Authority
- P.4 Applicable Documents and Forms
- P.5 Measurement/Verification
- P.6 Cancellation

Chapter 1. INTRODUCTION

- 1.1 Goals of a Continuity of Operations Plan
- 1.2 Elements of a Viable Continuity of Operations Plan Capability
- 1.3 Sensitivity Level of the Continuity of Operations Plan

Chapter 2. RESPONSIBILITIES

- 2.1 Center Director
- 2.2 Directors, Program Managers, and Equivalent Level Contractor Managers
- 2.3 Chief Information Officer
- 2.4 Chief Financial Officer
- 2.5 Center Continuity of Operations Plan Coordinator
- 2.6 Vital Records Manager
- 2.7 Continuity of Operations Plan Coordinator

Chapter 3. PLANNING PROCESS

- 3.1 Continuity of Operations Plan Criteria
- 3.2 Continuity of Operations Plan Development

Chapter 4. MAINTENANCE, EXERCISES, AND ACTIVATION

- 4.1 Plan Maintenance
- 4.2 Plan Exercises
- 4.3 Plan Activation

- Appendix A Glossary of Terms**
- Appendix B Abbreviations and Acronyms**
- Appendix C Evaluation of Functional Activities**

PREFACE

P.1 PURPOSE

Provide requirements for development, maintenance, testing and implementation of a Continuity of Operations Plan (COOP).

P.2 APPLICABILITY

- a. This directive applies to all Kennedy Space Center (KSC) directorate level organizations, including internal contractors only to the extent specified or referenced in the appropriate contracts, grants, or agreements.
- b. In this directive, all mandatory actions (i.e., requirements) are denoted by statements containing the term “shall.” The terms “may” or “can” denote discretionary privilege or permission, “should” denotes a good practice and is recommended, but not required, “will” denotes expected outcome, and “are/is” denotes descriptive material.
- c. In this directive, all document citations are assumed to be the latest version unless otherwise noted.

P.3 AUTHORITY

[NPD 1040.4, NASA Continuity of Operations](#) (COOP)

P.4 APPLICABLE DOCUMENTS AND FORMS

- a. [OMB Circular A-130, Management of Federal Information Resources](#)
- b. [NPR 1040.1, NASA Continuity of Operations \(COOP\) Planning Procedural Requirements](#)
- c. [NPD 1440.6, NASA Records Management](#)
- d. [NPR 1600.1, NASA Security Program Procedural Requirements](#)
- e. [KNPR 8715.2, Comprehensive Emergency Management Plan](#)

P.5 MEASUREMENT/VERIFICATION

None

P.6 CANCELLATION

This revision cancels KNPR 1040.3, Rev. B, Continuity of Operations Planning (COOP).

/digitally signed 9/21/2020 by Ms. Bray/
Nancy P. Bray
Director, Spaceport Integration and Services

Distribution: TechDoc Library

CHAPTER 1 INTRODUCTION

This Kennedy NASA Procedural Requirements (KNPR) summarizes requirements from [NPR 1040.1, NASA Continuity of Operations \(COOP\) Planning Procedural Requirements](#), and provides specific requirements for the KSC.

1.1 Goals of a Continuity of Operations Plan

1.1.1 The goals of a COOP plan are to:

- a. Ensure continuous performance of NASA's Critical Infrastructure (NCI) during an emergency situation.
- b. Protect NASA NCI, associated facilities, equipment, vital records, and other assets.
- c. Reduce or mitigate disruptions to NCI.
- d. Minimize damage and losses.
- e. Resume full, normal essential operations through a timely and orderly recovery from an emergency.

1.2 Elements of a Viable Continuity of Operations Plan Capability

1.2.1 KSC is required to have a viable continuity of operations capability for each identified NCI that ensures the performance of the NCI during any type of emergency or other situation that may disrupt normal operations for more than 30 days.

1.2.2 In accordance with [NPR 1040.1](#), a viable continuity of operations capability must:

- a. Be maintained at a high level of readiness.
- b. Be capable of being implemented with and without warning.
- c. Be operational within 12 hours of activation.
- d. Maintain sustained essential operations for a minimum of 30 days.
- e. Take maximum advantage of available field infrastructure, existing Agency emergency management program procedures, and established Information Technology (IT) Security plans.

1.3 Sensitivity Level of the Continuity of Operations Plan

1.3.1 A COOP plan is deemed "Sensitive But Unclassified" and will be handled in accordance with [NPR 1600.1, NASA Security Program Procedural Requirements](#).

1.3.2 Electronically stored and distributed copies of the COOP plan must be protected from unauthorized access.

CHAPTER 2 RESPONSIBILITIES

2.1 Center Director

2.1.1 The Center Director is responsible for:

- a. Appointing a Center COOP Coordinator. At KSC, the NASA Emergency Management Officer (NEMO) is the Center COOP Coordinator.
- b. Emphasizing emergency management and COOP readiness as part of the Center's core mission.
- c. Ensuring the Center Chief Financial Officer (CFO) provides necessary assistance to COOP activity.

2.2 Directors, Program Managers, and Equivalent Level Contractor Managers

2.1.1 The Directors, Program Managers, and equivalent level contractor managers are responsible for:

- a. Assigning a COOP coordinator for their organization or program.
- b. Conferring with the Center Critical Infrastructure Assurance Officer (CIAO) to obtain the NCI inventories per [NPR 1600.1](#).
- c. Ensuring evaluation of NCI functions, facilities, and other essential interdependencies for consideration in the organization's COOP.
- d. Ensuring the development, maintenance, testing and implementation of a COOP plan, when required, in accordance with the requirements in this KNPR, [NPR 1040.1](#), and all references stated within NPR 1040.1.
- e. Ensuring that COOP requirements are included in the organization's budget activity.

2.3 Chief Information Officer

2.3.1 The Chief Information Officer is responsible for:

- a. Ensuring KSC IT systems have the appropriate security and contingency plans as required under [OMB Circular A-130](#).
- b. Ensuring Special Management Attention systems are evaluated for COOP.

2.4 Chief Financial Officer

2.4.1 The CFO is responsible for:

- a. Establishing a COOP funding mechanism.
- b. Assisting Center management on COOP budget development.

- c. Providing systems that will account for COOP expenditures.

2.5 Center Continuity of Operations Plan Coordinator

2.5.1 The Center COOP Coordinator, NEMO, is responsible for:

- a. Coordinating the development and consolidation of continuity of operations for KSC's NCI and functions in accordance with requirements and guidelines in [NPR 1040.1](#) and [KNPR 8715.2, Comprehensive Emergency Management Plan](#), (CEMP). See Chapter Six and Table E in the CEMP for COOP requirements crosswalk.
- b. Coordinating, scheduling, and overseeing yearly training and exercises with the Agency COOP Coordinator and individual organizational and program managers as required.
- c. Coordinating tenant organization COOP plan development, as appropriate.
- d. Reviewing all COOP plans for conformance to [NPR 1040.1](#).
- e. Conducting an annual review of all Center COOP plans.
- f. Reviewing restoration plans.
- g. Reviewing and updating KNPR 1040.3 as required.
- h. Providing a list of NCI to NASA and Contractor COOP Coordinators.

2.6 Vital Records Manager

2.6.1 The Vital Records Manager is responsible for ensuring that local policies and procedures are developed and implemented for the identification, designation, protection, and retrieval of Center vital records in accordance with [NPD 1440.6](#), NASA Records Management.

2.7 Continuity of Operations Plan Coordinator

2.7.1 A COOP Coordinator is responsible for:

- a. Developing a reporting structure for their COOP plan that reflects the overall team organization and reporting requirements that shall be employed during response, resumption, recovery, and restoration processes.
- b. Coordinating all program COOP activity with the Center COOP Coordinator.
- c. Initiating scheduled COOP plan maintenance activities including:
 - (1) Maintaining updated personal contact information for all individuals responsible for specific COOP activities.
 - (2) Conducting and documenting annual COOP plan reviews.

- (3) Implementing COOP plan changes, issuing updated plan documentation and informing Center COOP Coordinator of changes.
- d. Assuring all the duties ascribed to team leaders in [NPR 1040.1](#) are performed and documented.
- e. Ensuring well defined notification requirements for COOP team members are included in the COOP plan. The Agency Emergency Notification System (ENS) shall be used to notify all team members.
- f. Utilizing team leaders for COOP plan implementation.

CHAPTER 3 PLANNING PROCESS

3.1 Continuity of Operations Plan Plan Criteria

3.1.1 The following criteria shall be used to determine if a COOP plan is required:

- a. Would the loss of a KSC NCI compromise national security?
- b. Would the loss of a KSC NCI have an immediate and significant adverse effect on the health and safety of the general public at large?
- c. Is KSC's NCI critical to the performance of another agency's COOP and required, by agreement, to remain viable without interruption under all emergency conditions?
- d. Is the KSC NCI regulated, legislated, or directed by Executive Order to operate under all emergency scenarios?
- e. Is the NCI tied to a space exploration vehicle and equipment command and control operation that, if rendered inoperable, would place personnel, vehicles or equipment at risk?
- f. Is the NCI deemed a vital service as determined by NASA management?

3.1.2 Assets identified as NCI may (due to size, configuration, or age) be difficult, expensive or impractical to relocate to an alternate facility or rebuild if destroyed (e.g., Launch Pads, Vehicle Assembly Building, Local Area Network, etc.). Therefore, assets shall be carefully evaluated under the COOP plan criteria to ensure that all aspects of their criticality and replaceability are thoroughly considered before establishing a COOP plan. All recommended strategies of a COOP plan may not be applicable to all NCI .

3.2 Continuity of Operations Plan Plan Development

3.2.1 Evaluate NCI against the criteria for development of a COOP plan (see Appendix C, Evaluation of Functional Activities). Each organization shall provide a copy of Appendix C to the Center COOP Coordinator by December 31 of each year. Negative inputs are also required.

- a. Create a list of all of the organization's NCI, functions, and activities.
- b. Compare the list to the COOP plan criteria listed in paragraph 3.1.a. If the item listed does not meet any of the criteria, a COOP plan is not required for that item.

c. For items that meet one or more criteria:

- (1) A COOP plan is required provided the item meets the implementation time constraints defined in Chapter 1, paragraph a.
- (2) Analyze and prioritize with respect to the requirements for resumption, recovery, or restoration.
- (3) Create a list all functional activities and supporting operations for each item.
- (4) Identify the actions that shall be implemented to mitigate the effects of each potential hazard and set priorities and time criticalities for implementing each supporting activity.

3.2.2 For each item that has been determined to require a COOP plan, a criticality matrix shall be developed and a criticality determination performed (refer to [NPR 1040.1](#) paragraphs 3.3.1.g, .h, and .i). This will serve as the basis for establishing and organizing the COOP plan.

3.2.3 Each COOP plan shall address all items in [NPR 1040.1](#) paragraphs 3.3.2 through 3.3.8, as applicable.

3.2.4 In many cases fully redundant NCI, functions or activities capability are prohibitively expensive and will not be continued or required to be performed in case of a disaster (see paragraph 3.1.b). Those NCI functions or activities should only be addressed with a restoration plan. Of primary concern in these cases is the protection of configuration control documentation, engineering drawings, software, and data so that restoration may be accomplished as efficiently as possible.

CHAPTER 4 MAINTENANCE, EXERCISES AND ACTIVATION

4.1 Plan Maintenance.

4.1.1 Each directorate, program, and equivalent level contactor organization shall review and update their COOP plans annually and document their review to the Center COOP Coordinator by December 31 of each year.

4.1.2 The Center COOP Coordinator shall in turn forward the Center review to the Agency COOP Coordinator by January 31 of the following year.

4.1.3 For a COOP plan that is in the development phase, each organization shall provide a status to the Center COOP Coordinator by December 31 of each year.

4.1.4 Electronic copies of current approved COOP plan shall be provided to the Center COOP coordinator.

4.2 Plan Exercises

4.2.1 Organizations having responsibility for COOP activity shall test the COOP plan and document the results of the exercise at least annually using one or more of the suggested exercise types:

- a. Structured shutdown

- b. Tabletop or tactical
- c. Live full-scale production
- d. Simulation

4.2.2 Results shall be documented as soon as possible but not later than two weeks after completion of the test.

- a. Problems or weaknesses shall be identified with assigned corrective action plans identifying changes required to the COOP plan.
- b. A copy of the results and corrective action plan shall be provided to the Center COOP coordinator.
- c. The Center COOP Coordinator shall provide a copy of the results to the Center Director.

4.3 Plan Activation

4.3.1 Initial notification of an incident or situation will normally flow from the Spaceport Integration and Services directorate, Protective Services Office (PSO) to KSC senior management and to the COOP coordinators. The PSO has the responsibility to notify NASA Headquarters, Office of Protective Services, of any significant KSC emergencies. The Agency ENS shall be used as the primary means of notification.

4.3.2 Activation of a COOP plan will often necessitate the activation and response of the CEMP. In accordance with the CEMP, only the Center Director or a designee may declare a disaster situation for KSC. Once a plan has been activated, the assembly point for Center management shall be the 7th floor conference room of the Central Campus Building, M7-M301. If the disaster makes this location inaccessible, the alternate location shall be in the Launch Control Center, K6-900, Emergency Operations Center, room 2R21. Depending upon the severity of the disaster, a second alternate assembly point is located in Building M7-355, Neil Armstrong Operations and Checkout Building, Room 4297. If an offsite Emergency Relocation Group (ERG) is deemed necessary, in addition to senior management, the ERG shall include a representative from the following support disciplines:

- a. Protective Services, (Security and Emergency Management)
- b. Public Affairs
- c. Procurement
- d. IT
- e. The Spectrum Manager (Telecommunications)
- f. The CFO
- g. Safety
- h. Records Management
- i. Human Resources
- j. The CIAO

4.3.3 Organizational ERGs shall be activated only as directed by each organization and COOP coordinators based on the impact of the disruption. Restoration priorities will be established in response to the disruption.

4.3.4 Initial focus shall be on reestablishing essential office operations and ensuring that restoration teams focus on communications, application, and program recovery priorities.

APPENDIX A Glossary of Terms

Emergency Relocation Group:

Support group that leaves the Center and assembles off site when an emergency or disaster renders the Center unsafe to occupy.

Mission Essential Infrastructure (defined in NPR 1040.1):

Operations, functions, physical assets, IT resources deemed by the Agency to constitute the Agency's most critical and essential to the success of NASA's mission. Established in PDD 63, "Critical Infrastructure Protection."

Special Management Attention Systems:

The Office of Safety and Mission Assurance has developed the Special Management Attention Requirements Tracking System (SMARTS) to capture all safety and mission assurance requirements statements. The requirement numbers in NASA documents are the SMARTS database identification numbers for the requirement statements that appear in the document.

Vital Records:

Essential agency records that are needed to meet operational responsibilities under national security emergencies or other emergency or disaster conditions (emergency operating records) or to protect the legal and financial rights of the Government and those affected by Government activities.

APPENDIX B Abbreviations and Acronyms

CEMP	Comprehensive Emergency Management Plan
CFO	Chief Financial Officer
CIAO	Critical Infrastructure Assurance Officer
COOP	Continuity of Operations, as defined in NPD 1040
ENS	Emergency Notification System
ERG	Emergency Relocation Group; supports the offsite COOP
IT	Information Technology
KNPR	Kennedy NASA Procedural Requirements
KSC	Kennedy Space Center
NASA	National Aeronautics and Space Administration
NCI	NASA Critical Infrastructure
NEMO	NASA Emergency Management Officer
PSO	Protective Services Office
SMARTS	Special Management Attention Requirements Tracking System

APPENDIX C

Evaluation of Functional Activities

ORGANIZATION _____
Submitted by _____ Date _____

FUNCTIONAL ACTIVITIES – NCI and DEPENDENT SYSTEMS	CRITERIA FOR COOP (from 3.1.a) (Y or N)						COOP REQUIRED (Y or N)	Operational Need time/date after disruption (Days or Hours)	COOP ELEMENTS NEEDED (Y or N)				
	(1)	(2)	(3)	(4)	(5)	(6)			P R E V E N T I O N	R E S P O N S E	R E S U M P T I O N	R E C O V E R Y	R E S T O R A T I O N